

CLAIMS

What is claimed is:

1. A power distribution system for a computing system, comprising:
a plurality of power connectors configured to carry electrical power to
5 electronics components of the computing system; and
a plurality of power distribution terminals, each terminal is connected to a
group of at least one of the connectors, the terminals being selectively divisible into a
first set of grouping combinations and a second set of grouping combinations, each
grouping combination within each set of grouping combinations corresponds to
10 approximately the same number of power connectors, the terminals being configured to
be connected to power supply circuits in accordance with the selected set of grouping
combinations.
2. The power distribution system of claim 1, wherein the number of power
connectors corresponding to each grouping combination within each set of grouping
15 combinations differ by at most one.
3. The power distribution system of claim 1, wherein each group of the power
connectors includes at least approximately 1/12 of the total number of power connectors.
4. The power distribution system of claim 1, wherein each group of the power
connectors includes at most approximately 1/4 of the total number of power connectors.

5. The power distribution system of claim 1, wherein each group of the power connectors is selected from approximately $1/12$, $1/6$ and $1/4$ of the total number of power connectors.

6. The power distribution system of claim 1, wherein each set of grouping combinations is selected from 2 grouping combinations, 3 grouping combinations and 4 grouping combinations.

7. The power distribution system of claim 1, wherein the first set of grouping combinations includes 2 grouping combinations, each grouping combination includes approximately $1/2$ of the total number of power connectors and the second set of grouping combinations includes 3 grouping combinations, each grouping combination includes approximately $1/3$ of the total number of power connectors.

8. The power distribution system of claim 1, wherein the power distribution terminals include 6 terminals, each of 2 of the terminals being connected to approximately $1/4$ of the power connectors, each of another 2 of the terminals being connected to approximately $1/6$ of the power connectors, and each of yet another 2 of the terminals being connected to approximately $1/12$ of the power connectors.

9. The power distribution system of claim 1, wherein the power distribution terminals include 8 terminals, each of 4 of the terminals being connected to approximately $1/6$ of the power connectors and each of another 4 of the terminals being connected to approximately $1/12$ of the power connectors.

10. A method for distributing power among multiple electronics components of a computing system, comprising the steps of:

selecting one of a plurality of sets of grouping combinations of power connectors, each grouping combination within each set of grouping combinations

5 corresponds to approximately the same number of power connectors; and

connecting each power distribution terminal of a plurality of power distribution terminals to a power supply circuit in accordance with the selected set of grouping combinations, the number of power supply circuits being equal to the number of grouping combinations in the selected set of grouping combinations, each terminal being
10 connected to a corresponding group of power connectors.

11. The method of claim 10, wherein the number of power connectors corresponding to each grouping combination within each set of grouping combinations differ by at most one.

12. The method of claim 10, wherein each group of the power connectors
15 includes at least approximately 1/12 of the total number of power connectors.

13. The method of claim 10, wherein each group of the power connectors includes at most approximately 1/4 of the total number of power connectors.

14. The method of claim 10, wherein each group of the power connectors is selected from approximately 1/12, 1/6 and 1/4 of the total number of power connectors.

15. The method of claim 10, wherein each set of grouping combinations is selected from 2 grouping combinations, 3 grouping combinations and 4 grouping combinations.

16. The method of claim 10, wherein at least one set of the grouping
5 combinations includes 2 grouping combinations, each grouping combination includes approximately 1/2 of the total number of power connectors and at least another set of the grouping combinations includes 3 grouping combinations, each grouping combination includes approximately 1/3 of the total number of power connectors.

17. The method of claim 10, wherein the power distribution terminals include 6
10 terminals, each of 2 of the terminals being connected to approximately 1/4 of the power connectors, each of another 2 of the terminals being connected to approximately 1/6 of the power connectors, and each of yet another 2 of the terminals being connected to approximately 1/12 of the power connectors.

18. The method of claim 10, wherein the power distribution terminals include 8
15 terminals, each of 4 of the terminals being connected to approximately 1/6 of the power connectors and each of another 4 of the terminals being connected to approximately 1/12 of the power connectors.